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**REMARKS – General**

By the above amendment, the applicant has amended the claims 6,7 to overcome the technical objections as pointed out by last OA.

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**The Claim Rejection Under 35 USC § 112 Has Been Overcome**

The last O.A. rejected the Claims 9,10. because "... The limitation underlined above is not disclosed in the specification and hence considered to be new matter". However, the applicant respectfully points out those embodiments has been disclosed in specification. (see page 6, lines 29-32, page 7, lines 26-28, and page 8, lines 11-18). Applicant requests reconsideration of these rejections.

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**The Claim Objections Has Been Overcome**

The last O.A. rejected Claims 6-8. The Applicant requests reconsideration of these objections, because of following:

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**The References And Differences Of The Present Invention Thereover**

Applicant will discuss the reference and the general novelty of the present invention and its unobviousness over the reference.

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Mahany [ US 6,665,536 ] disclosed a "communication network comprises an access point, a plurality of wireless roaming devices, a first wireless communication channel, and a second wireless communication channel." (see col.2 lines 16-20). And, "the first wireless communication channel that supports communication flow via the communication network, while the second wireless communication channel is used to manage the flow of communication through

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the first wireless communication channel" (see col.2 lines 25-30). Further, Mahany uses only first wireless channel/radio to communicate with roaming devices (which only has one radio, see col.2 lines 23-25) and spare the second channel /radio as "In addition, the first and third radio transceivers are operable on the first wireless communication channel, while the second radio transceiver and the radio receiver are operable on the second wireless communication channel." (see col.2 lines 30-34)

Mahany only provide the redundancy for wired LAN connection, or specifically a backup upstream LAN connection for the second AP via wireless, as "Once communications with an upstream access point 35 is established, each access point 35 and 36 will dedicate one of its wireless adapters 39 and 42, respectively to provide a wireless repair of the break 45 in the infrastructure 33." (col.7 lines 31-34).

The applicant's current invention provides a multi-channel redundant wireless link utilizing a pair of Multi-channel Redundant wireless network link (RWNL) devices. All the communicating sub-links of the applicant's RWNL device aggregates the bandwidths together while provide a group redundancy among the sub-links. There is no "wireless roaming devices" as described by Mahany. The two LAN networks are communicating together only via the redundant link formed by two RWNL devices (see fig.3)

In conclusion, Mahany discloses a communication scheme of wireless devices/network and its one upstream wired network, which is different than the embodiment of the applicant's current invention. Therefore, the system feature or functions that are running in wireless devices are completely different. Mahany only provides a wireless backup communication for the LAN connection break of the second AP. (see fig.3, 45 and 30). Mahany dose not provide wireless to

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wireless redundancy itself. If the wireless link (fig.3 33) is jammed, then the second AP (see fig.3, 36) become useless, and complete network is failed. The applicant's current invention provides a multiple redundancy wireless link that is able to keep the communication as long as there is one working wireless sub-link.

### **The Claim Rejections Under 35 USC § 102 Has Been Overcome**

The last O.A. rejected the Claims 6-8 as being unpatentable "over Mahany [ US 6,665,536]". Applicant requests reconsideration of this rejection, for the following reasons:

**Regarding claim 6**, the last OA points out that "Mahany discloses a wireless redundant link". As discussed above, Mahany only discloses one wireless backup for LAN connection break of second AP (see fig.3, col.1 lines 43- col.2 line 52, col.7 lines 31-39). Mahany's devices and feature cannot do multiple wireless to wireless redundant between device like the embodiment of the applicant's current invention. (see fig.3).

Further, in Mahany's embodiment, two AP are connected to the same computer network LAN line (see fig.3, 35, 36, 33). This is different than the applicant's current invention where two LAN networks (see fig.3, 310, 320) is connected via two RWNL devices (see fig.3 10A, 10B).

Therefore, the applicant suggests the last OA rejects the claim 6 of the applicant's current application over Mahany is improper. The applicant respectfully request reconsideration of this rejection.

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Regarding claim 7, the last OA points out that "Mahany further discloses a method wherein the said RWNL device may include a control unit (MAC processor and/or CPU processor) for extending the system control to wireless networking unites ... extend the controlling capability via the control unit. See gif.3, and col.1, lines 43-col.2, line52, col.3, lines 18-67, col.5, line 47- col.6, line 37" According to Mahany each of his radio attached with on "MAC PROCESSOR" (see fig.3) to be the intermediate function between the radio and the "CPU PROCESSOR" (see fig.3). In the applicant's current invention, there is only one control unit (see fig.1 109), and the system architecture between radios, control unit, and processor unit (see fig.1) is different than Mahany's disclosure (see fig1, 2, 3).

Therefore, the applicant suggests the last OA reject the claim 7 of the applicant's current application over Mahany is improper. The applicant respectfully requests reconsideration of this rejection.

Regarding claim 8, the last OA pointed out that "Mahany further discloses a redundant wireless link (RWNL)" As discussed before, Mahany discloses a different redundant wireless link than the applicant's current invention. Specifically, Mahany only discloses one wireless backup for LAN connection break of second AP (see fig.3, col.1 lines 43- col.2 line 52, col.7 lines 31 39). There is no wireless to wireless redundant between Mahany's devices. It is not possible nor Mahany's intention to aggregate the wireless communication capacity of wireless to wireless redundant link between any two AP. Because of the fundamental difference between Mahany's disclosure and the embodiment of the applicant's current invention, the rest details pointed out by last OA are different as well. E.g. In order to have different system features, the system functions that need to do the wireless control must be different.

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Therefore, the applicant suggests the last OA reject the claim 8 of the applicant's current application over Mahany is improper. The applicant respectfully request reconsideration of this rejection.

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**Conclusion**

For all of the above reasons, the applicant submits that the specification and claims are now in proper form, and that the claims all define patentably over the prior art. Therefore he submits that this application is now in condition for allowance, which action he respectfully solicits.

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**Conditional Request For Constructive Assistance**

Applicant has amended the specification and claims of this application so that they are proper, definite, and define novel structure which is also unobvious. If, for any reason this application is not believed to be in full condition of allowance, Applicant respectfully request the constructive assistance and suggestions of the Examiner pursuant to M.P.E.P. § 2173.02 and § 707.07(j) in order that the undersigned can place this applicant in allowable condition as soon as possible and without the need for further proceedings.

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Very respectfully,

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